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| 10/590,262 | 11/29/2007 | Anant A. Setlur | GLOZ 200141US01 | 6090 |
| 27885 | 7590 | 06/08/2010 | EXAMINER | |
| FAY SHARPE LLP 1228 Euclid Avenue, 5th Floor The Halle Building Cleveland, OH 44115 | | | MALSAWMA, LALRINFAMKIM HMAR | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,262

Applicant(s)

SETLUR ET AL.

Examiner

Lex Malsawma

Art Unit

2892

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9 and 11-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 16 is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 16 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7, 9 and 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1:

In the last three lines of the claims, the limitation, “*and wherein the product of (incident LED flux) x (excitation cross-section of the phosphor) x (phosphor material decay time) is less than 0.3*”, is indefinite because there are at least two phosphor materials (i.e., a first phosphor material and a second phosphor material) such that it is unclear as to whether the limitation refers to each of the phosphor materials or to a combination of the two phosphor materials.

For the purposes of examination, the examiner interprets the limitations as, “*and wherein for each phosphor material, the product of (incident LED flux) x (excitation cross-section of the phosphor) x (phosphor material decay time) is less than 0.3*”

Regarding claims 5 and 6:

Each of these claims refers the “*the phosphor material*”, however, there are at least two phosphor materials; accordingly, these claims are indefinite. The examiner interprets these claims as referring to “*the first phosphor material*”.

Regarding claim 7:

This claim depends from claim 6, accordingly, it is indefinite. Furthermore, in line 3, “*wherein said said second phosphor*” should read “*wherein said second phosphor*”.

Regarding claim 9:

This claim refers the “*the phosphor material*”, however, there are at least two phosphor materials; accordingly, this claim is indefinite. The examiner interprets this claim as referring to “*the second phosphor material*”.

Regarding claim 15:

This claim depends from canceled claim 8. The examiner interprets this claim as depending from claim 1.

Regarding claims 2-4 and 11-14:

These claims are indefinite because they depend from an indefinite claim.

Allowable Subject Matter

3. Claim 16 is allowed.
4. Claims 1-7, 9 and 11-15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
5. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-7, 9 and 11-15 (all as interpreted/understood) are allowable primarily because the references of record, singly or in combination, cannot anticipate or render obvious the following limitations, in combination as recited in claim 1: a second phosphor material with a relatively slower decay time positioned relatively further from the LED, wherein *for each*

phosphor material, the product of (incident LED flux) x (excitation cross-section of the phosphor) x (phosphor material decay time) is less than 0.3.

Claim 16 is allowable primarily because the references of record, singly or in combination, cannot anticipate or render obvious the following limitations, in combination as currently recited in claim 16: a second phosphor material with a relatively slower decay time positioned relatively further from the LED, wherein the phosphor materials are selected and deposited such that for each phosphor material, the product of (incident LED flux) x (excitation cross-section of the phosphor) x (phosphor material decay time) is less than 0.3.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tamaki et al. (US 2004/0135504 A1) and Takahashi et al. (US 2003/0214233 A1) both disclose light emitting devices comprising two phosphor materials, wherein a second phosphor is positioned relatively farther from the LED, however, the references disclose neither the second phosphor has a relatively slower decay time nor a product of (incident LED flux) x (excitation cross-section of the phosphor) x (phosphor material decay time) is less than 0.3.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lex Malsawma whose telephone number is 571-272-1903. The examiner can normally be reached on Mon. - Thur. (4-12 hours between 5:30AM and 10 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thao Le can be reached on 571-272-1708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lex Malsawma/
Primary Examiner, Art Unit 2892